

State of California Schools Construction Accomplishments and Energy Efficiency Projects

Many state institutions and private sector groups involved in school construction are committed to building resource and energy efficient facilities that meet Governor Schwarzenegger's vision of a Green California. Programs, projects, and information that encourage and enable stakeholders to construct high performance schools are listed below:

- The **California Energy Commission's Bright Schools program** assists K-12 school districts in reducing energy use. The program provides energy audits and design review of new construction and modernization plans. Energy efficiency measures are identified that can be implemented by school districts during maintenance projects and when planning for new construction and modernization.
- The **Healthy School Environments Assessment Tool (Healthy Schools Tool)** is a management software tool developed by U.S.EPA to help school districts create a customized inspection program to voluntarily assess and track all of their school facility environmental, health and safety conditions and quickly obtain guidance on methods to address potential issues. The release of Version 1.0 is planned for November 2005. California agencies are currently working with U.S. EPA to provide information that would customize the Healthy Schools Tool for California schools and is planned to be completed by spring of 2006.
- The **Coalition for Adequate School Housing (CASH)** featured a High Performance School strand at their March 2005 Annual Conference in Sacramento that included a clinic unveiling the new CHPS implementation roadmap. In addition, the CASH summer workshop series was dedicated to "Designing Schools to Meet CHPS and LEED Standards" where the tentative selection of the CHPS guidelines under the Executive Order was first announced.
- **Collaborative for High Performance Schools (CHPS)** and **Public Interest in Energy Research (PIER)** are collaborating on three demonstration projects addressing displacement ventilation, ultraviolet irradiation, and enhanced portable classroom space conditioning systems, which make students and teachers more productive by improving classroom indoor air quality, energy use and noise reduction. The associated energy report is due out the first quarter of 2006.
- **CHPS Demonstration Schools:** Cesar E. Chavez Education Center in Oakland and Alder Creek Middle School in Truckee (both CEC sponsored), Heroes (CIWMB sponsored), Georgina Blach Intermediate School in Los Altos (PG&E sponsored), Newport Coast Elementary School in Newport Beach (Southern California Edison Sponsored), High Tech High School in Los Angeles and Southeast Learning Center in Huntington Park (LAUSD). These schools were sponsored in order to prove the concept of high performance schools and provide a sprinkling of CHPS built schools around California for stakeholders and users to visit and experience.
- A **2005 survey** conducted by a leading builder in the U.S. taken by 665 building owners, architect/engineers and developers revealed substantial benefits in building green educational facilities including an increase in student performance, ability to attract and retain teachers and reduce student absenteeism. This survey confirms the interest for high performance schools.
- The **Los Angeles Unified School District (LAUSD)** strongly supports CHPS and leads the nation as the first school district to adopt CHPS criteria in the design of schools. LAUSD has implemented a \$14.5 billion school construction program using the design criteria to meet CHPS guidelines that includes construction of more than 150 schools during the next 3 to 5 years.

- If 50% of the schools constructed in the next ten years are designed and built to CHPS standards, the **projected energy savings** is \$88 million dollars which includes: 471 million kilowatt hours saved, and 3.4 million therms saved, and a reduction of 210,000 kilowatts from the grid.